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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/739,325	12/19/2000	Luc Attimont	Q62358	2589	
7590 06/02/2004			EXAM	EXAMINER	
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC			CHO, HONG SOL		
Suite 800 2100 Pennsylvania Avenue, N.W.		ART UNIT	PAPER NUMBER		
Washington, DC 20037-3213			2662	//	
			DATE MAILED: 06/02/2004	4	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
•	09/739,325	ATTIMONT ET AL.					
Office Action Summary	Examiner	Art Unit					
	hong s cho	2662					
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim y within the statutory minimum of thirty (30) days vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONEI	nety filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on	_•						
2a) This action is <b>FINAL</b> . 2b) ▼ This	action is non-final.						
3) Since this application is in condition for allowar							
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠ Claim(s) <u>1-5</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6) Claim(s) <u>1-5</u> is/are rejected.	Claim(s) <u>1-5</u> is/are rejected.						
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.						
Application Papers							
9)☐ The specification is objected to by the Examine	r.						
10)⊠ The drawing(s) filed on <u>19 December 2000</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the priority documents</li> <li>application from the International Bureau</li> <li>* See the attached detailed Office action for a list</li> </ul>	s have been received. s have been received in Application rity documents have been receive u (PCT Rule 17.2(a)).	on No d in this National Stage					
Attachment(s)							
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Ll Interview Summary Paper No(s)/Mail Da	(PTO-413) te.					
<ul> <li>2) Notice of Dransperson's Patent Drawing Review (P10-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date <u>2</u>.</li> </ul>		atent Application (PTO-152)					

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#### **DETAILED ACTION**

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## **Drawings**

1. New corrected drawing is required in this application because there are no legends for Figure 1. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

# Claim Rejections - 35 USC § 102

- 2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
  - (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Chan (U.S 5897613).

Regarding Claim 1, Chan discloses a method providing for sound signal packets to be transmitted from the digitizing ("A-D converter", figure 1, element 111) and encoding ("coder", figure 1, element 113) means without taking account of the presence or absence of speech signals ("the silence detector detects

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silent signals and speech signals", column 3, lines 4-11) in the processed sound signals during an initial stage of call optimization ("during the silence interval at the beginning of a conversation, one or a few packets carrying a portion of the silence signals", see column 3, lines 5-30).

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chan in view of Baker.

Regarding Claim 2, Chan discloses a method providing for sound signal packets to be transmitted from the digitizing ("A-D converter", figure 1, element 111) and encoding ("coder", figure 1, element 113) means without taking account of the presence or absence of speech signals ("the silence detector detects silent signals and speech signals", column 3, lines 4-11) in the processed sound signals during an initial stage of call optimization. Chan fails to disclose determining the receiver buffer size. However, the processing algorithm for determining the size of receiver buffer is well known in the art. Baker discloses a method to determine the size of receive buffer ("adjust the size of the packet").

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queue (buffer)", column 4, lines 55-67) on the basis of a statistical evaluation of the delays observed on the received packets ("based on interpacket delay statistics", column 5, lines 1-8). In view of this, having the concept of Baker and then given the teaching of Chan, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the process of determining receiver buffer size to determine the initial call optimization stage. The motivation to combine is to get the benefit taught by Baker since Baker states at column 2, lines 44-48 that actual network delay statistics are used to determine the optimal receiver buffer size.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman in view of Chan.

Regarding Claim 3, Chapman discloses Voice Activity Detection

(Determining) means that is used to detect voice (speech) signals in sound signals (column 4, lines 56-66). The usage of voice activity determining means in a voice processing system in a packet switched networks, for example, Voice over Internet Protocol (VoIP) is well known in the art. Chapman teaches that Voice Activity Detection enables digitized sound signals to be transmitted only if they contain speech signals ("starts audio (speech) packet transmission based on the existence of a conversation (speech signals)", column 4, lines 56-66). Chapman, however, lacks the specific operation of a subscriber terminal. Chan shows telecommunications hardware, in particular subscriber terminal, which is connected to packet switched network ("transmission channel", figure

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1, element 102; column 2, lines 65-66) that is designed to send digitized sound signals ("an analog-to-digital converter that converts analog sound signals into digital signals", figure 1, element 111). In view of this, having the teachings of Chapman and then given the concept of Chan, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process of voice activation detection means to be embedded in subscriber's terminal. The motivation to combine is to get the benefit taught by Chapman on the voice activity detection means to detect and transmit the voice (speech) signals in sound signals.

7. Claim 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman in view of Chan, and further in view of Baker.

Regarding Claim 4 and 5, Chapman and Chan, as modified in claim 3, disclose all the aspects of the claimed invention except determining process of the receiver buffer size. Chapman and Chan fail to disclose determining the receiver buffer size. However, the processing algorithm for determining the size of receiver buffer is well known in the art. Baker discloses a method to determine the size of receive buffer ("adjust the size of the packet queue (buffer)", column 4, lines 55-67) on the basis of a statistical evaluation of the delays observed on the received packets ("based on interpacket delay statistics", column 5, lines 1-8). In view of this, having the concept of Baker and then given the teachings of Chapman and Chan, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process

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of enablement and termination of voice activation detection means to be controlled by timing means instead of a unique IP flow. The motivation to combine is to get the benefit taught by Chapman since Chapman discloses the method of controlling voice activity detection means to reduce call (packet) latency (column 4, lines 8-10) to get the optimal receiver buffer based on interpacket delay.

### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patent is cited to show the state of the art with respect to communication over a packet switched network

US Patent (62596770 to Jain

US Patent (5526353) to Henley et al

US Patent (6658027) to Kramer et al

US Patent (6377931) to Shlomot

US Patent (6665317) to Scott

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 703-305-0343. The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 703-305-4798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hong Cho Examiner Art Unit 2662

> RICKY NGO PRIMARY EXAMINER